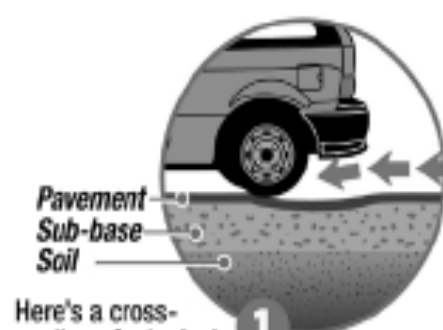
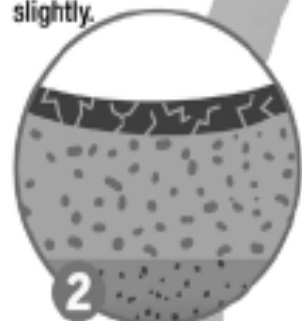


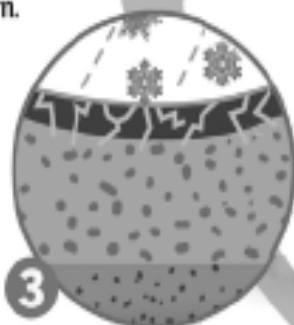
HOW POTHOLES FORM



Here's a cross-section of a typical road. The weight of each vehicle bends the pavement slightly.

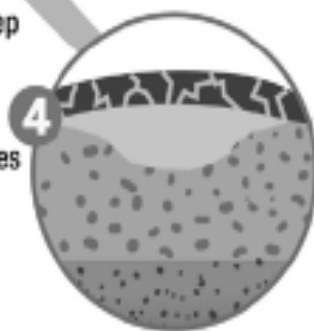


Cracks start to form as the asphalt gets worn.

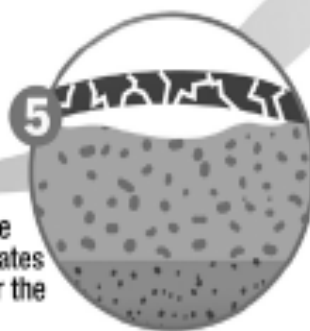


When the cracks are deep enough, water gets into the sub-base.

The water freezes and expands, pushing up on the cracked pavement.



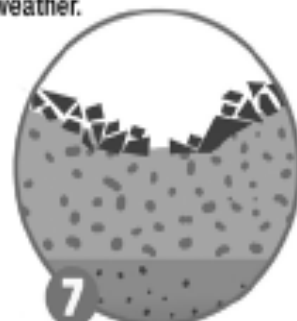
When the ice melts, it creates a void under the pavement.



HOW THEY'RE FIXED

■ The pothole is carved out with a jackhammer or masonry saw to create a neat rectangle. The excess asphalt is removed, an adhesive is applied and new asphalt is added in layers. It's then levelled and compacted with a pavement roller.

■ During cold weather, temporary repairs are made with cold patch asphalt. Hot asphalt is used for permanent repairs during warmer weather.



The edges of the pothole will continue to crack and crumble, making the hole larger.



Weight from subsequent vehicles going over the pavement breaks it up and a pothole is formed.

The Life of a Pothole



1 Which combination of factors contributes most to the creation of a pothole?

- A heavy rain and loose soil
- B freezing water and busy traffic
- C snow tires and pavement cracks
- D worn asphalt and temporary repairs

2 What does the word “void” (Stage 5) mean?

- F freezing water
- G an empty space
- H cracked pavement
- J a crumbled sub-base

3 What remains unchanged as a pothole is formed and fixed?

- A the soil
- B the sub-base
- C the pavement
- D the temperature

4 Which feature in this graphic text identifies the problem and its solution?

- F photos
- G arrows
- H subtitles
- J numbers

5 How is the information in the first bullet under “How They’re Fixed” organized?

- A by cause and effect
- B as steps in a sequence
- C in order of importance
- D by comparing and contrasting

6 What does the photograph in the middle of the page show?

- F a repaired pothole
- G how to fix a pothole
- H another view of Stage 7
- J the early stages of pothole formation